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APPLICATION NO. FILING DATE		IG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,528 05/01/2001		01/2001	Zhun Zhong	US 010218	4127
24737	7590	06/29/2004		EXAMINER	
		UAL PROPER	REKSTAD, ERICK J		
P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			ART UNIT	PAPER NUMBER	
	,		2613	5	
			DATE MAILED: 06/29/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
41	Office Action Summan	09/846,528	ZHONG ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Erick Rekstad	2613				
Period f	The MAILING DATE of this communica or Reply	tion appears on the cover sheet	with the correspondence address				
THE - Extended - If th - If No - Fail Any	MORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICA ensions of time may be available under the provisions of 3 or SIX (6) MONTHS from the mailing date of this communication of the period for reply specified above is less than thirty (30) do period for reply is specified above, the maximum statute ure to reply within the set or extended period for reply will, reply received by the Office later than three months after need patent term adjustment. See 37 CFR 1.704(b).	TION. 7 CFR 1.136(a). In no event, however, may action. ays, a reply within the statutory minimum of ry period will apply and will expire SIX (6) No by statute, cause the application to become	y a reply be timely filed thirty (30) days will be considered timely. MONTHS from the mailing date of this communication. e ABANDONED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed of	on <u>01 May 2001</u> .					
2a)□							
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposit	tion of Claims						
4)🖾	Claim(s) <u>1-12</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)□	Claim(s) is/are allowed.						
6)⊠	Claim(s) <u>1-6,8,11 and 12</u> is/are rejected.						
· · · —	Claim(s) <u>7,9 and 10</u> is/are objected to.						
8)[	Claim(s) are subject to restriction and/or election requirement.						
Applicat	tion Papers						
9)🖂	The specification is objected to by the E	xaminer.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
_	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)	The oath or declaration is objected to by	y the Examiner. Note the attac	hed Office Action or form PTO-152.				
Priority	under 35 U.S.C. § 119						
a)	Acknowledgment is made of a claim for D All b) Some * c) None of:  1. Certified copies of the priority do  2. Certified copies of the priority do  3. Copies of the certified copies of the application from the International See the attached detailed Office action for the certified copies of the attached detailed Office action for the attached detailed Office action for the certified copies of the attached detailed Office action for the attached detailed Office action for the certified copies of the certified copies of the certified copies of the certified copies of the priority do  3. Copies of the certified copies of the priority do  3. Copies of the certified copies of the priority do  3. Copies of the certified copies of the priority do  4. Copies of the certified copies of the priority do  5. Copies of the certified copies of the priority do  6. Copies of the certified copies of the priority do  6. Copies of the certified copies of the priority do  7. Copies of the certified copies of the priority do  8. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do  9. Copies of the certified copies of the priority do	cuments have been received. cuments have been received in the priority documents have be Bureau (PCT Rule 17.2(a)).	n Application No een received in this National Stage				
Attachme	nt(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)							
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 3 and 4.  5) Notice of Informal Patent Application (PTO-152)  6) Other:							

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#### **DETAILED ACTION**

# Specification

The disclosure is objected to because of the following informalities: Page 7 line 3 states "found not be" the sentence should state "found not to be". Page 12 second paragraph states "in Figure 9" the sentence should state "in Figure 10". Page 13 third paragraph states "in Figure 10" the sentence should state "in Figure 11".

Appropriate correction is required.

# Claim Objections

Claim 10 is objected to because of the following informalities: The claim states a dependence on claim 8. The claim should depend on claim 9. Appropriate correction is required.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

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Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,584,154 to Wu.

[claim 1]

Wu teaches a method for decoding interlaced video frames, the method comprising the steps of;

Down scaling a motion vector to produce a reduced resolution motion vector (Col 15 Lines 7-9, Col 13 Lines 16-53);

Detecting a moving area in an interlaced video reference frame (Col 15 Lines 9-14) Note the IDCT is the motion-compensated difference between pictures (Col 7 Lines 26-31);

Modifying the reduced resolution motion vector to produce a modified motion vector (Col 15 Lines 10-25); and

Retrieving pixel values from the interlaced video reference frame according to the modified motion vector (Col 15 Lines 26-65). (Col 12 Line 64-Col 16 Line 15, Figs. 8, 11-14).

[claim 2]

Wu further teaches modification of the motion vector so that pixels from each field are given an equal weight while performing an interpolation (Col 13 Lines 16-40). Note applicant states this modification is the rounding of non-integer motion vectors on page 7 lines 1-3.

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[claims 3 and 4]

Wu teaches the method of claim 1, wherein the reduced resolution motion vector is modified so that the pixels values are retrieved in a correct field order. Wu further teaches the the vertical component of the reduced resolution motion vector is modified by changing an odd integer to a nearest even integer (Col 15 Lines 13-39).

Claims 1-3, 8 and 11-12 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,310,919 to Florencio.

[claims 1, 11 and 12]

Florencio teaches a method for decoding interlaced video frames, the method comprising the steps of;

Down scaling a motion vector to produce a reduced resolution motion vector (Col 4 Lines 16-28);

Detecting a moving area in an interlaced video reference frame (Col 6 Lines 27-39);

Modifying the reduced resolution motion vector to produce a modified motion vector (Col 4 Lines 29-36); and

Retrieving pixel values from the interlaced video reference frame according to the modified motion vector (Col 6 Lines 40-52). (Col 3 Line 48-Col 4 Lines 52, Col 5 Line 64-60, Figs. 1, 2, 5A-B).

Florencio further teaches the storage of the method on computer program code embodied in tangible media, such as floppy diskettes, cd-roms, hard drives, or any other computer readable storage medium as required by claim 11 (Col 9 Lines 14-32).

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Florencio teaches a decoder as required by claim 12 (Fig. 1).

[claim 2]

Florencio further teaches modification of the motion vector so that pixels from each field are given an equal weight while performing an interpolation (Col 8 Lines 7-15). Note applicant states this modification is the rounding of non-integer motion vectors on page 7 lines 1-3.

[claim 3]

Florencio further teaches modification of the motion vector so that the pixel values are retrieved in a correct field order (Col 4 Lines 36-52, Col 7 Line 51-Col 8 Line 6, Fig. 2).

[claim 8]

Florencio teaches the determining if frame motion compensation was performed on each macro block of a video sequence (Col 7 Lines 16-50, Fig. 2).

# Claim Rejections - 35 USC § 103

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Florencio.

[claims 5 and 6]

Florencio teaches the truncation of the motion vector values to conform with the ½ pixel resolution (Col 8 Lines 7-15). It is well known in the art that truncation is the dropping of all non-integer parts of a real number (Official Notice). It would have been obvious to one of ordinary skill in the art at the time of the invention that by truncating

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the motion vector values to conform to ½ pixel resolution, Florencio is changing ¼ and ¾ pixel positions to ½ pixel positions.

# Allowable Subject Matter

Claims 7, 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,690,836 to Natarajan et al.

US Patent 6,184,935 to laquinto et al.

US Patent 5,635,985 to Boyce et al.

US Patent 6,148,033 to Pearlstein et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Rekstad whose telephone number is 703-305-5543. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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